

Visual Comfort & Co.

TEST REPORT

SCOPE OF WORK

LM-79 testing report

REPORT NUMBER

251027067GZU-006

ISSUE DATE

26 January 2026

REVISION DATE

None

NUMBER OF PAGES

13

DOCUMENT CONTROL NUMBER

Report format for LM-79_G

© 2024 INTERTEK



Report No.: 251027067GZU-006

TEST REPORT

TEST OF ONE LED LUMINAIRE

MODEL NO. MDOWS86327XXX

Remark: "XXX" represents the color of the appearance.

RENDERED TO

Visual Comfort & Co.

Contact Name: Javan Rivero

7400 LINDER AVE. SKOKIE, IL, 60077

Email: jrivero@visualcomfort.com

Phone No.: 847-410-4552

<u>TEST:</u>	Electrical and Photometric as required to the IES LM-79 test standard.
<u>AUTHORIZATION:</u>	The testing performed was authorized by signed quote number: QGZ251023107.
<u>STANDARDS USED:</u>	The following American National Standards or Illuminating Engineering Society of North America Test Guides were used in part or totally to test each specimen:
IES LM-79-24	Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products
ANSI C78.377-2017 (R2022)	Specifications of the Chromaticity of Solid State Lighting Products
<u>DESCRIPTION OF SAMPLE:</u>	The client submitted one sample of model MDOWS86327XXX. The sample was received by Intertek in undamaged condition and tested as received. The sample designation was S251027067-012.
<u>MANUFACTURER /FACTORY & ADDRESS:</u>	Guangzhou Xiongyi Precision Metalworking Co., Ltd Hantang Industrial Zone, Langbian Village, Shiji Town, Panyu District, Guangzhou City, Guangdong Province, China 511450
<u>DATES OF TESTS:</u>	20 November 2025
<u>ISSUED BY:</u>	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
<u>TEST LOCATION:</u>	Room101/301/401/102/202/302/402/502/602/702/802, No. 7-2, Caipin Road, Huangpu District, Guangzhou, Guangdong, China

***** End of Page *****

TEST REPORT

SUMMARY

Model Number:	MDOWS86327XXX
Description:	LED Luminaries
Brand Name:	--

Test Condition: 120V, 60Hz For MDOWS86327XXX

Criteria	Result
Total Lumen Output	92.9 lm
Total Power	25.8 W
Luminaire Efficacy	3.6 lm/W
S/MH(C0/180)	1.52
S/MH(C90/270)	1.12
Correlated Color Temperature (CCT)	2931 K
Color Rendering Index (CRI)	91
R9	53
Chromaticity Coordinate (x)	0.4463
Chromaticity Coordinate (y)	0.4146
Chromaticity Coordinate (u')	0.2521
Chromaticity Coordinate (v')	0.5268

Remark:

N/A

***** End of Page *****

TEST REPORT

EQUIPMENT LIST

Equipment Used	Model Number	Control Number
Goniophotometer System	Go-R5000	SA063-16
KONICA MINOLTA - Illuminance meter	CX-2B_WL	SA063-16-01
Standard Lamp	D215S	SA063-16-06
Digital Power Meter	PLM3000	SA063-16-09
AC power source for Goniophotometer	PCR-1000WH	SA063-16-10
Temperature Meter	S500-TH	SA047-182

GENERAL REMARK

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

When determining for test conclusion, measurement uncertainty of tests has been considered.

Throughout this report a ☐ comma ☒ point is used as the decimal separator.

***** End of Page *****

TEST REPORT

TEST METHOD

Seasoning in Sample Orientation – LED Products

No seasoning was performed in accordance with IES LM-79

Light Distribution and Output Measurements

Light Distribution and total light output (luminous flux) were measured using a Go-R5000 Type-C Rotating Mirror Goniophotometer. Temperature 25°C and relative humidity of 60% was measured at a position in the testing laboratory.

The lamp rotates only around the fixed vertical axle in the prescribed burning position. The lamp and mirror permit the measurement of luminous intensity at the direction of any horizontal or vertical angle without tilting the lamp. The lamp was allowed to stabilize before measurements were made.

Chromaticity Measurements

Chromaticity was measured using a 2 meters integrating sphere spectral lamp measurement system, 4 π geometry, with an interior coating reflectance no less than 95 %. Temperature was measured at a position inside the sphere shielded from direct light. Relative humidity of 65% was measured at a position in the testing laboratory.

Spectral radiant flux measurements were made using spectroradiometer attached to the detector port of the integrating sphere. Each lamp was allowed to stabilise before measurements were made. The calibration of the integrating sphere spectroradiometer system is by the reference/standard lamps which are traceable to National Institute of Metrology P.R. CHINA. Lamp efficacy (lumens per watt) for each lamp model was then computed based on the luminous flux result. Electrical measurements including voltage, power and power factor were measured using YOKOGAWA - Digital Power Meter., model WT310E.

Correction factor (self-absorption) has been considered when doing measurement.

Standard lamp used for Goniophotometer method:

Model: D215S

Current: 4.809A DC

Standard lamp used for integrating sphere:

Model: D204

Current: 3.958A DC

***** End of Page *****

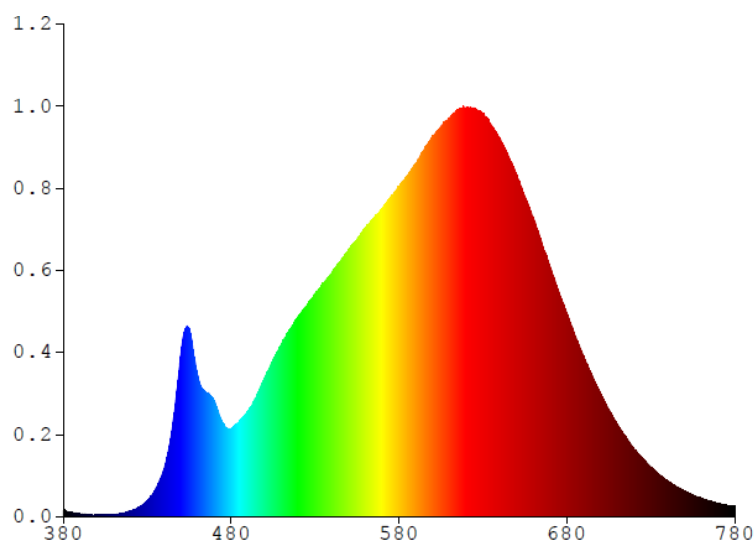
TEST REPORT

RESULTS OF TESTS

Test Condition: 120V, 60Hz For MDOWS86327XXX

Spectral Distribution over Visible Wavelengths

nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm	nm	mW/nm
380	0.7928	480	12.6920	580	47.6760	680	29.3380	780	1.5772
385	0.6783	485	13.8470	585	49.2840	685	26.0850		
390	0.3307	490	15.2570	590	51.0670	690	23.1900		
395	0.2147	495	17.3970	595	52.9760	695	20.4190		
400	0.2414	500	20.0810	600	55.0840	700	17.7880		
405	0.2380	505	22.6420	605	56.2680	705	15.4780		
410	0.2776	510	24.9400	610	57.5960	710	13.3420		
415	0.4754	515	27.0110	615	58.7980	715	11.5400		
420	0.7845	520	28.9690	620	59.0150	720	9.7895		
425	1.3295	525	30.4700	625	58.8980	725	8.3917		
430	2.3251	530	32.2070	630	58.1860	730	7.1773		
435	3.9854	535	33.7820	635	56.4940	735	6.1023		
440	6.8978	540	35.2110	640	54.7170	740	5.1376		
445	12.9730	545	36.8250	645	52.1610	745	4.3930		
450	23.4550	550	38.5000	650	49.4170	750	3.6968		
455	27.0490	555	39.9920	655	46.2190	755	3.1624		
460	20.4190	560	41.7320	660	43.1390	760	2.6530		
465	17.9450	565	43.1720	665	39.6730	765	2.2558		
470	16.6550	570	44.4800	670	36.0770	770	1.9341		
475	13.6040	575	46.1820	675	31.8900	775	1.6336		



***** End of Page *****

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDOWS86327XXX

Total operation burning time: 60 minutes

Stabilization time: 30 minutes

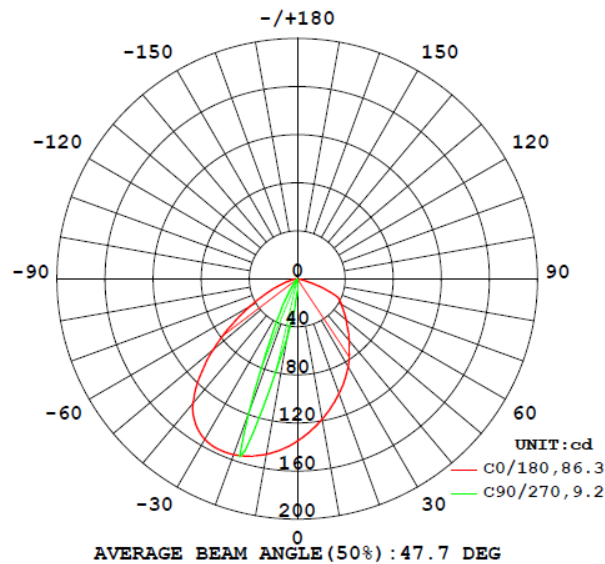
Photometric Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Correlated Color Temperature (K)	CRI	R9	CIE 31'	CIE 31'	CIE 76'	CIE 76'
					Chromaticit	Chromaticit	Chromaticit	Chromaticit
					y	y	y	y
					Coordinate	Coordinate	Coordinate	Coordinate
					(x)	(y)	(u')	(v')
MDOWS86327XXX								
S2510270 67-012	base-up	2931	91	53	0.4463	0.4146	0.2521	0.5268

Photometric and Electrical Measurements at 25°C – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute Luminous Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
MDOWS86327XXX							
S2510270 67-012	base-up	120.0	216.2	25.8	0.994	92.9	3.6

Intensity (Candlepower) Summary at 25°C - Candelas



***** End of Page *****

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDOWS86327XXX

Intensity (Candlepower) Summary at 25°C - Candelas

V \ H(°)	0	22.5	45	67.5	90
0	134.9	50.9	25.5	12.5	8.7
5	127.1	35.0	11.1	5.9	4.0
10	118.8	23.7	5.7	2.7	2.0
15	110.3	12.8	3.1	1.6	1.2
20	101.7	8.0	1.9	1.0	0.7
25	93.3	5.0	1.1	0.6	0.4
30	84.7	3.1	0.7	0.3	0.2
35	75.8	2.0	0.4	0.2	0.1
40	67.3	1.3	0.3	0.1	0.0
45	59.5	0.9	0.1	0.0	0.0
50	53.1	0.5	0.0	0.0	0.0
55	47.3	0.3	0.0	0.0	0.0
60	42.4	0.1	0.0	0.0	0.0
65	38.1	0.0	0.0	0.0	0.0
70	22.5	0.0	0.0	0.0	0.0
75	7.6	0.0	0.0	0.0	0.0
80	0.5	0.0	0.0	0.0	0.0
85	0.0	0.0	0.0	0.0	0.0
90	0.0	0.0	0.0	0.0	0.0
95	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0
105	0.0	0.0	0.0	0.0	0.0
110	0.0	0.0	0.0	0.0	0.0
115	0.0	0.0	0.0	0.0	0.0
120	0.0	0.0	0.0	0.0	0.0
125	0.0	0.0	0.0	0.0	0.0
130	0.0	0.0	0.0	0.0	0.0
135	0.0	0.0	0.0	0.0	0.0
140	0.0	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0
155	0.0	0.0	0.0	0.0	0.0
160	0.0	0.0	0.0	0.0	0.0
165	0.0	0.0	0.0	0.0	0.0
170	0.0	0.0	0.0	0.0	0.0
175	0.0	0.0	0.0	0.0	0.0
180	0.0	0.0	0.0	0.0	0.0

***** End of Page *****

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDOWS86327XXX

Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens (lm)	% Luminaire (%)
MDOWS86327XXX		
0-30	48.6	52.3
0-40	65.4	70.4
0-60	86.4	93.0
0-90	92.9	100.0
60-90	6.5	7.0
0-180	92.9	100.0

Beam Angle

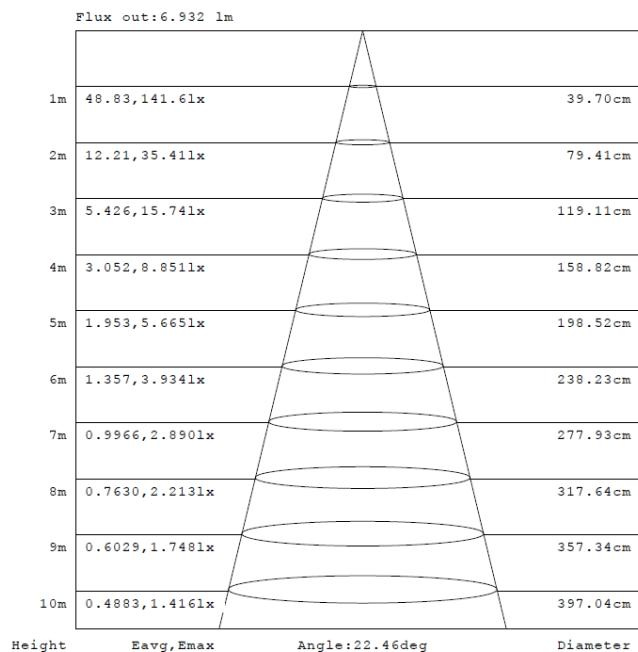
Total Beam Angle(°)
47.7

Illumination Plots

Model No.: MDOWS86327XXX

Mount Height: 2.5 m

Illuminance - Cone of Light



***** End of Page *****

TEST REPORT

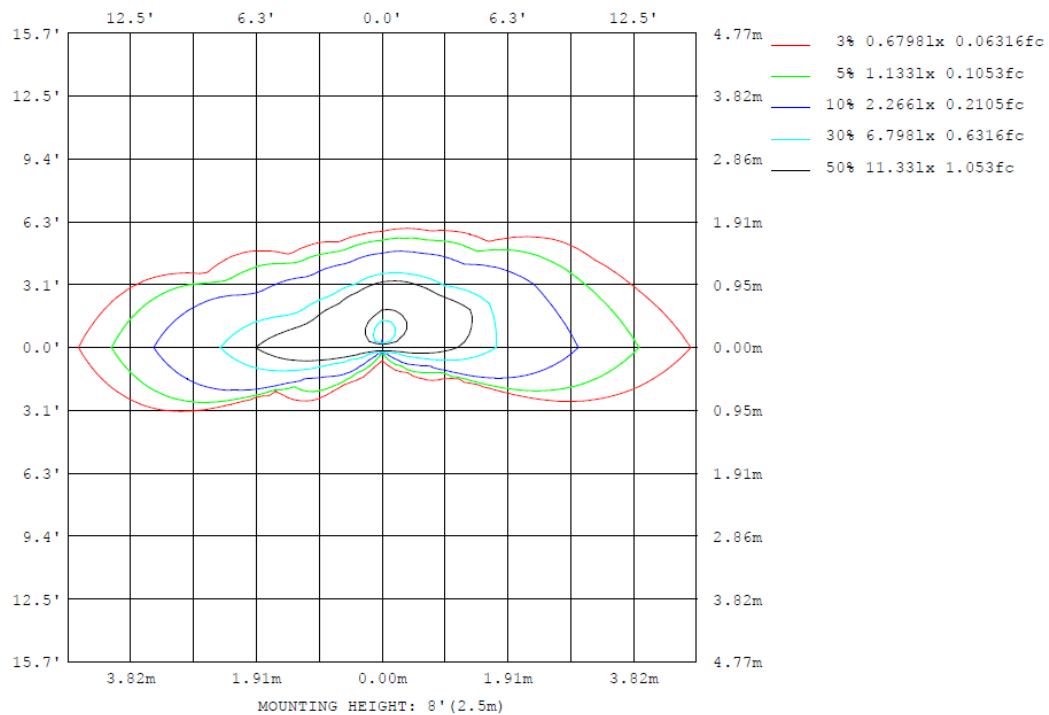
RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDOWS86327XXX

Model No.: MDOWS86327XXX

Mount Height: 2.5 m

Isoillumination Plot



***** End of Page *****

TEST REPORT

RESULTS OF TESTS (cont'd)

Test Condition: 120V, 60Hz For MDOWS86327XXX

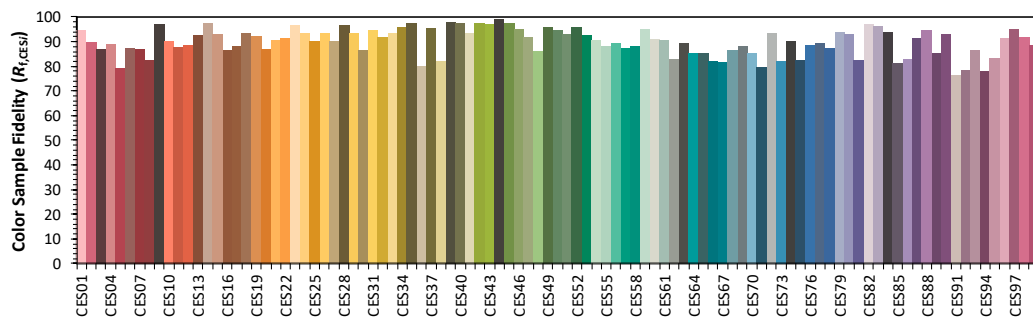
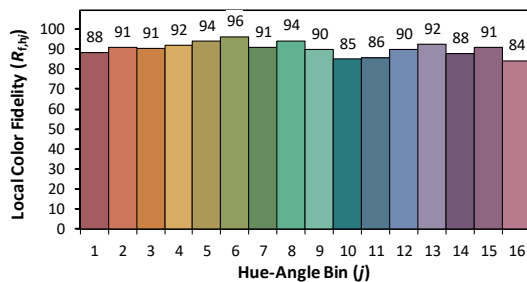
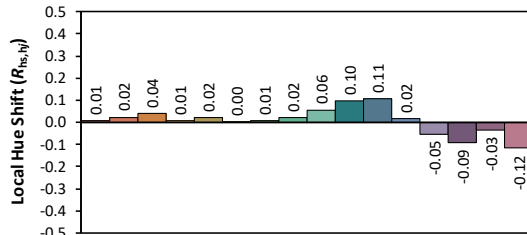
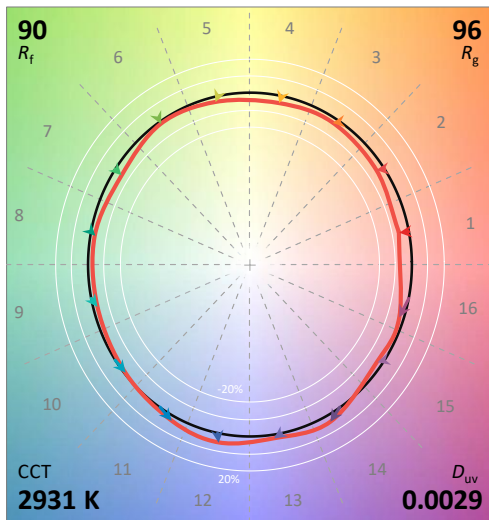
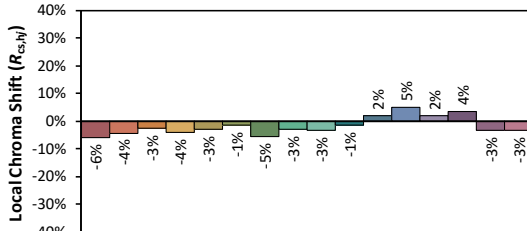
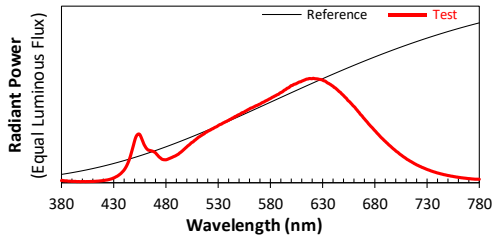
ANSI/IES+B3:X17 TM-30-18 Color Rendition Report

Source: User SPD

Manufacturer: Visual Comfort & Co.

Date: 2025/11/20

Model: MDOWS86327XXX



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4463
 y 0.4146
 u' 0.2521
 v' 0.5268

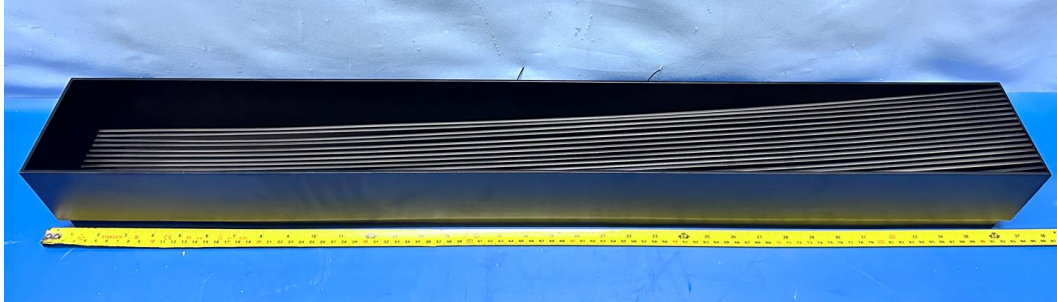
CIE 13.3-1995
(CRI)
 R_a 91
 R_g 53

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

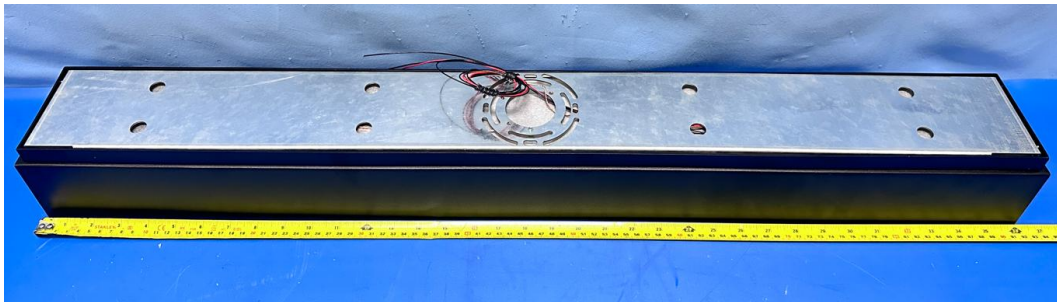
***** End of Page *****

TEST REPORT

PRODUCT PICTURE (not to scale)



External view of MDOWS86327XXX



***** End of Page *****

TEST REPORT

PRODUCT PICTURE (not to scale)



View of LED driver PVD27-C070V38-UNV3-HE-P



View of LED

In Charge Of Tests:

Done Ye

Done Ye
Engineer

Report Reviewed By

Shelley Ying

Shelley Ying
Reviewer

Attachment: None

***** End of Report *****